



Australian Bureau of Statistics

CensusAtSchool Australia

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Resources



CaSQ 24B - Using Bivariate Data to Make a Scatter Plot to Find a Relationship Between Height and Foot Length

You can download this activity as a rich text file (RTF) using the link at the bottom of the page.

How to: Get a Random Sample from CensusAtSchool

Go to the CensusAtSchool Random Sampler to download a sample.

Reference year: *(Select year)* **Sample size:** *At least 30 students*

Select questions: *Height, Foot length*

Location: *Select location* **Year level:** *(Select a range of year levels)*

To protect privacy there is a rule built into the sampler that the requested sample size cannot exceed 10% of the respondents for the parameters entered.

Task:

Following from CaSQ 24A, in this activity you will use a scatter plot to see if it is true that a person's height is 7 times their foot length.

Setting up a scatter plot

1. Select 30 students from the random sample and copy each person's height and foot length into a table.

2. Decide which is the dependent and the independent variable and set up a pair of labelled axes.
3. Look at the ranges of each data set and set up an appropriate scale on each axis.
4. Carefully show the height and foot length of each person on the plot.
5. Look at the overall pattern or trend of the data. Place your ruler so that it has the same slope as the pattern or trend. Next draw a line following this trend but with about half of the data points above and half below the line.
6. Select a point on the line and use the x and y value to find the relationship between the height and the foot length.
7. Use two other points on your line to confirm your result.
8. Write a sentence describing what you have found about the number of times longer a person's height is than their foot length.

CaSQ 24A precedes this lesson and CaSQ 24C is an extension

Download the full activity:

RTF

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This page last updated 12 November 2013

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